

Appl'n No: 10/580,928
Amdt dated November 3, 2009
Reply to Office Action of August 4, 2009

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings, including Figures 3-6C and 8A-11, replaces the previously submitted sheets of drawings including Figures 3-6C and 8A-11. More specifically, Applicant has amended Figures 3, 4, 5, 6A, 6B, 6C, 8A, 8B, 9A, 9B, and 10. Each replacement sheet has been clearly labeled "Replacement Sheet" in the page header.

Attachment: 6 Replacement Sheets of drawings including Figures 3-6C and 8A-11

REMARKS

Claims 1-3, 6-8, and 18-20 are pending in the application. Claims 1-3, 7, and 8 have been amended. Claims 4, 5, and 9-17 have been cancelled. Claims 6 and 18 have been withdrawn. Claims 19 and 20 have been added. Claim 1 is in independent form.

Specification

The specification has been amended to clarify terminology originally set forth in the application as filed. Applicant attests that no new matter has been added thereto.

Drawings

The drawings stand objected under 37 C.F.R. §1.83(a). Specifically, the Examiner states that “1) the guide having a radius of curvature concentric with the radius of curvature of the window and 2) the runner as having the channel and the carrier as having the shaft must be shown or the feature(s) canceled from the claim(s).” In response, Applicant has attached 6 replacement sheet of drawings, including Figures 3-6C and 8A-11, hereto directly following these Remarks. Each replacement sheet has been labeled as “Replacement Sheet” in the page header as per 37 C.F.R. §1.121(d).

In amended Figure 3, an arcuate window 20 having a radius of curvature that is concentric with a radius of curvature of the guide 42 has been added. The arcuate window 20 having a radius of curvature that is concentric with a radius of curvature of the guide 42 is clearly supported in the specification as originally filed.

In amended Figure 4, reference number “51” has been added to identify the lateral axis 51. Reference numbers “60” have been added to identify the elliptical surfaces 60 of the trunnions 40a, 40b. Reference numbers “66, 68” have been amended to -- 62, 64 -- to identify the surfaces 62, 64 of the secondary channels 50a, 50b, respectively.

In amended Figure 5, reference number “18” has been added to identify the carrier plate 18. Reference numbers “56” have been added to identify the plate apertures 56.

In amended Figure 6A, reference number "52" has been amended to -- 52a -- to identify one of the slider channels 52a.

In amended Figure 6B, reference number "14" has been added to identify the motor 14. Reference number "16" has been added to identify the drive rod 16. Reference number "18" has been added to identify the carrier plate 18. Reference number "38" has been added to identify the internal threaded bore 38. Reference numbers "40a, 40b" have been added to identify the trunnions 40a, 40b. Reference number "42" has been added to identify the guide 42. Reference number "52a" has been added to identify one of the slider channels 52a.

In amended Figure 6C, reference number "14" has been added to identify the motor 14. Reference number "16" has been added to identify the drive rod 16. Reference number "18" has been added to identify the carrier plate 18. Reference number "38" has been added to identify the internal threaded bore 38. Reference numbers "40a, 40b" have been added to identify the trunnions 40a, 40b. Reference number "42" has been added to identify the guide 42. Reference number "52a" has been added to identify one of the slider channels 52a.

In amended Figure 8A, reference number "112" has been added to identify the carrier plate 112.

In amended Figure 8B, reference number "112" has been added to identify the carrier plate 112.

In amended Figure 9A, reference number "112" has been added to identify the carrier plate 112.

In amended Figure 9B, reference number "112" has been added to identify the carrier plate 112. Reference number "120b" has been added to identify one of the abutment walls 120b. Reference number "126" has been added to identify one of the mounting members 126.

In amended Figure 10, reference number "100" has been added to identify the channel frame 100. Reference number "126" has been added to identify one of the mounting members 126.

Applicant respectfully requests the objection to the drawings be withdrawn.

Claim Rejections – 35 U.S.C. §112

Claim 4 stands rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. In response, Applicant has cancelled claim 4.

Claims 1-5 and 7-17 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully traverses the rejection.

Claim 1, as amended, claims an automotive window regulator system including a guide rod defining a central axis extending in a vertical direction, the guide rod adapted for rotating about the central axis; a runner including a body portion and a pair of trunnions, the runner drivingly engaged with the guide rod and moving in the vertical direction along the guide rod between a first position and a second position in response to rotation of the guide rod; and a window carrier including a primary channel extending in the vertical direction and a secondary channel extending in a lateral direction substantially orthogonal to the vertical direction, the body portion of the runner disposed in the primary channel preventing rotation of the runner about the central axis and the trunnions disposed in the secondary channel coupling the runner and carrier for movement of the carrier with the runner in the vertical direction, the trunnions defining a lateral axis substantially orthogonal to the central axis; wherein the carrier rotates about the lateral axis and translates in a horizontal direction substantially orthogonal to the vertical and lateral directions in response to moving the runner between the first and second positions, whereby rotational and translational movement of the carrier permits nonparallel movement of the carrier with respect to the central axis as the runner moves between the first and second positions.

Regarding claim 1, the Examiner states it is unclear what is “to permit nonparallel movement of the carrier with respect to the rod.” Applicant has amended claim 1 to clarify that “rotational and translational movement of the carrier permits nonparallel movement of the carrier with respect to the central axis....”

The Examiner states the language “with respect to the central axis” is unclear as to whether the translatable movement is from the bottom of the guide rod to the top or whether it is to travel orthogonally away from the axis of the guide rod. Applicant has amended claim 1 to clarify that “said carrier rotates about said lateral axis and translates in a horizontal direction substantially orthogonal to said vertical and lateral directions”

The Examiner states it is unclear as to whether the axis of the rod is orthogonal to the central axis or the runner and the carrier are rotatably connected to each other orthogonal to the axis of the rod. Applicant has amended claim 1 to clarify that “said carrier rotates about said lateral axis and translates in a horizontal direction substantially orthogonal to said vertical and lateral directions”

The Examiner states the limitation “the central axis” has insufficient antecedent basis in the claim. Applicant has amended claim 1 to set forth “a guide rod defining a central axis extending in a vertical direction ...” which provides proper antecedent basis for “said central axis.”

The Examiner states the word “thereby” in the phrase “movement thereby” is awkward and indefinite. Applicant has amended claim 1 to clarify that “said trunnions disposed in said secondary channel coupling said runner and carrier for movement of said carrier with said runner in said vertical direction”

Regarding claim 2, the Examiner states the word “and” in the phrase “mounted to said carrier, and further comprising” makes the claim unclear. Applicant has amended claim 2 to clarify that “and said system further including first and second glass run channels”

Regarding claim 3, the Examiner states the word “and” in the phrase ““mounted to said carrier, and further comprising” makes the claim unclear. Applicant has amended claim 3 to clarify that “and said system further including a guide engaging said carrier”

Regarding claims 4, 5, 9-11, and 14-17, Applicant has cancelled claims 4, 5, 9-11, and 14-17.

Therefore, Applicant respectfully requests that the rejection of claims 1-5 and 7-17 under 35 U.S.C. §112, second paragraph, be withdrawn.

Claim Rejections – 35 U.S.C. §102

Claims 1, 3, 4, 5, 10, 11, 12, 15, 16, and 17 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent 3,228,677 to Martens (“the ’677 reference”). Applicant respectfully traverses the rejection.

Claim 1, as amended, includes the limitation “a window carrier including a primary channel extending in said vertical direction and a secondary channel extending in a lateral direction substantially orthogonal to said vertical direction, said body portion of said runner disposed in said primary channel preventing rotation of said runner about said central axis and said trunnions disposed in said secondary channel coupling said runner and carrier for movement of said carrier with said runner in said vertical direction, said trunnions defining a lateral axis substantially orthogonal to said central axis.”

The Examiner contends a connecting member (65) and a footing (27) in the ’677 reference are equivalent to the runner 36 and the window carrier 18, respectively, in the application. The footing (27) does not include a primary channel extending in a vertical direction and a secondary channel extending in a lateral direction substantially orthogonal to the vertical direction, as specifically required by amended claim 1. Further, the connecting member (65) does not include a body portion disposed in a primary channel of the footing (27) and a pair of trunnions disposed in a secondary channel of the footing (27), as specifically required by amended claim 1. As such, the ’677 reference does not disclose each and every limitation of amended claim 1, and claim 1 is therefore allowable.

Claim 3 depends from amended claim 1 and, as such, is construed to incorporate by reference all of the limitations of the claim to which it refers, *see* 35 U.S.C. §112, fourth paragraph. Thus, claim 3 is allowable.

Applicant has cancelled claims 4, 5, 10, 11, 12, 15, 16, and 17.

Therefore, Applicant respectfully requests that the rejection of claims 1, 3, 4, 5, 10, 11, 12, 15, 16, and 17 under 35 U.S.C. §102(b) as being anticipated by the '677 reference be withdrawn.

Claim Rejections – 35 U.S.C. §103

Claims 2, 3, and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent 3,228,677 to Martens ("the '677 reference") as applied to claim 1 above. Applicant respectfully traverses the rejection.

As noted above, claim 1 has been amended with additional structure clearly not disclosed in the cited prior art reference. Claims 2 and 3 depend from amended claim 1 and, as such, are construed to incorporate by reference all of the limitations of the claim to which they refer, *see* 35 U.S.C. §112, fourth paragraph. Thus, claims 2 and 3 are allowable.

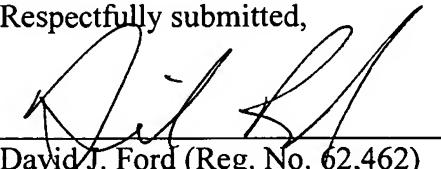
Applicant has cancelled claim 9.

Therefore, Applicant respectfully requests that the rejection of claims 2, 3, and 9 under 35 U.S.C. §103(a) as being unpatentable over the '677 reference be withdrawn.

It is respectfully submitted that this patent application is in condition for allowance, which allowance is respectfully solicited. If the Examiner has any questions regarding this amendment or the patent application, the Examiner is invited to contact the undersigned.

The Commissioner is hereby authorized to charge any additional fee associated with this Communication to Deposit Account No. 50-1759. A duplicate of this form is attached.

Respectfully submitted,


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